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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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22830	7590	09/10/2004	EXAMINER	
CARR & FERRELL LLP 2200 GENG ROAD PALO ALTO, CA 94303			PITARO, RYAN F	
			ART UNIT	PAPER NUMBER
			2174	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/040,397	BALLARD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ryan F Pitaro	2174	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on August 18, 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-96 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 3-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 042902 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ◊           | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-3 have been cancelled.
2. Claims 4-96 have been examined.

### ***Specification***

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

4. Claim 24 objected to because of the following informalities: "using a personalization system.integrated into the internet application" should be "using a personalization system integrated into the internet application". Appropriate correction is required.
5. Claim 47 is objected to because of the following informalities: The word "dependant" should be "dependent" since it better fits the subject matter of the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

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6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 20 recites the limitation "the customizable tab-over property" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

8. Claim 21 recites the limitation "the customizable tab-over property" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

9. Claim 22 recites the limitation "the customizable tab-over property" in lines 1 and

2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 4,5,7,8 are rejected under 35 U.S.C. 102(e) as being anticipated by Evans et al ("Evans", US# 6,266,675).

As per independent claim 4, Evans discloses a system for developing an  
application user

interface, the system comprising:

an integrated development environment (Column 13 lines 60-65) configured for a developer to specify a user interface element in the application user interface (Column 13 lines 62-65), the user interface element having a user customizable property (column 13 lines 65-67), the application user interface being configured as an interface between an internet application and a user (Column 4 lines 13-17);

an application designer configured to produce metadata characterizing the customizable property (Column 14 lines 1-3;7-11); and

a data repository (Figure 2A item 155) including a data record associated with the customizable property (Column 4 lines 6-8), the data record being modifiable by a user of the internet application and accessible using the metadata (Col 13 lines 65-67).

As per claim 5, which is dependent on claim 4, Evans discloses a system wherein a state of the user customizable property is configured to persist between a display of the application user interface and another display of the application user interface (Column 4 lines 47-51).

As per claim 7, which is dependent on claim 4, wherein the integrated development environment is further configured to associate the user interface element with a procedure within the internet application (Figure 8F3;*the add remove clear buttons are associated with procedures*)

As per claim 8, which is dependent on claim 4, Evans discloses a system including means for generating the internet application interface (Column 14 lines 29-33).

12. Claims 9,11,12 are rejected under 35 U.S.C. 102(e) as being anticipated by Evans et al ("Evans", US# 6,266,675).

As per independent claim 9, Evans discloses a system for developing an application user interface, the system comprising:

an integrated development environment (Column 13 lines 60-65) configured for a developer to specify a user interface element in the application user interface (Column 13 lines 62-65), the user interface element having a user customizable property (Column 13 lines 65-67), the user customizable property being a response to a user input device (Column 4 lines 13-17), the application user interface being an interface between a user and an internet application (Column 4 lines 13-17);

a data repository (Figure 2A item 155) including a data record configured to store a value characterizing the user customizable property (Column 4 lines 13-17), the value being user modifiable (Column 13 lines 65-67); and

an application designer configured to produce metadata for accessing the data record (Column 14 lines 1-3; 7-11).

As per claim 11, which is dependent on claim 9, Evans discloses a system wherein a state of the user customizable property is configured to persist between a displaying of the application user interface and another displaying of the application user interface (Column 4 lines 31-35).

As per claim 12, which is dependent on claim 9, Evans discloses a system wherein the customizable property is further responsive to an identity of the user (Column 4 lines 31-35).



***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Simonoff et al ("Simonoff", US# 6,005,568).

As per claim 6, which is dependent on claim 4, Evans fails to disclose the use of an application server in the development system, however Simonoff teaches an application server configured to support the internet application (Column 9 lines 23-24). Therefore it would have been obvious to an artisan at the time of the invention to combine Evan's system with Simonoff's teaching to ease the creation and management of the internet application with the use of an application server.

As per claim 10, which is dependent on claim 9, Evans fails to disclose a configurable internet application system, however Simonoff teaches an internet application system configured to support the internet application (Column 9 lines 15-23). Therefore it would have been obvious to an artisan at the time of the invention to



combine Evan's system with Simonoff's teaching for advantageously allowing the application to run on a client.

15. Claims 13-23, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 13, Evans discloses a system for developing an internet application user interface, the system comprising an integrated development environment (Column 13 lines 60-65) configured for specifying a user interface element in the internet application user interface (Column 13 lines 62-65), the integrated development environment including an application designer configured (Column 14 lines 1-3; 7-11). Evans fails to disclose a user interface element having a user customizable tab-order property, and metadata configured to characterize the customizable tab-order property. However, Castro teaches a system wherein the user interface element has a customizable tab-order property (Chapter 16 page 1 line 9) and further teaches metadata configured to characterize the customizable tab-order property (Chapter 16 Figure 16.57 line L; *tabindex being the metadata*). Therefore it would have been obvious to an artisan at the time of the invention to combine Evans' system with Castro's teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through tab-order.

As per independent claim 14, Evans discloses a system for developing an application user interface associated with an internet application comprising:

an integrated development environment (Column 13 lines 60-65) configured for a developer to specify a user interface element in the application user interface (Column 13 lines 62-65), the integrated development environment including an application designer configured (Column 14 lines 1-3; 7-11) to produce metadata to access a data record; and

a data repository (Figure 2A item 155) including the data record for storing data characterizing the customizable tab-order property (Column 4 lines 6-8), the data being user modifiable (Column 13 lines 65-67).

Evans fails to disclose a customizable tab-order property, however Castro teaches the user interface element having a user customizable tab-order property (Chapter 16 page 1 line 9). Therefore it would have been obvious to an artisan at the time of the invention to combine Evans' disclosure and Castro's teaching. In Evans' system, fields could be customized to reflect on the interface (Column 13 lines 65-67), therefore a user could customize Figure 6B of Evans changing the tabOrder (item 646) to Castro's tab order.

As per claim 15, which is dependent on claim 14, Evans fails to disclose a tab-over property. However, Castro teaches a system wherein the customizable tab-order property includes tab-over (Chapter 7, page 3 line 10-11).

As per claim 16, which is dependent on claim 15, Evans also fails to disclose a system where an additional element is susceptible to the use of tab-over. However, Castro teaches a system wherein the integrated development environment is further configured to specify an additional user interface element in the application user

interface, the additional user interface element specifiable to be skipped in a tab-order (Chapter 7, page 3 line 10-11;*wherein any element is able to take a value in the tab-order specifiable by tabindex*).

As per claim 17, which is dependent on claim 16, Evans fails to disclose an element, which is a button. However, Castro teaches a system wherein the additional user interface element is a button (Chapter 16 page 2 lines 12-13).

As per claim 18, which is dependent on claim 16, Evans fails to disclose an element, which is an image. However, Castro teaches a system wherein the additional user interface element is an image (Chapter 16 page 2 lines 15).

As per claim 19, which is dependent on claim 14, Evans fails to disclose a tab-order property to a class of elements. However, Castro teaches a system wherein the customizable tab-order property is configurable according to a class of user interface elements (Chapter 16 page 2 lines 12-13;*wherein all or none of the radio buttons can be assigned a tab-order for example*).

As per claim 20, which is dependent on claim 14, Evans teaches a system wherein the customizable tab-order property is configurable according to the identity of the user (Column 4 lines 31-35).

As per claim 21, which is dependent on claim 14, Evans teaches a system wherein the customizable tab-order property is configurable according to the identity of a client (Column 4 lines 45-51).

As per claim 22, which is dependent on claim 14, Evans fails to disclose metadata configurable to the tab-order property. However, Castro teaches a system

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wherein the metadata is configured to characterize the tab-over property of a specific application component (Chapter 16 page 1 line 9).

As per claim 23, which is dependent on claim 14, Evans discloses a system wherein the metadata includes a query for accessing the data record (Figure 11).

As per claim 25, which is dependent on claim 14, Evans fails to disclose a system wherein additional data characterizes the tab-order property. Official Notice is given that the use of an additional data record from a record of the first data record is well known in the art examples of which are: linked lists where a pointer points to an additional list or a structure with a reference element to another similar structure. Structures can reference each other and properties from structures follow with each structure, which is a defining property of a Structure. Therefore it would have been obvious to an artisan at the time of the invention to combine the additional data with Castro and Evans' system.

As per claim 26, which is dependent on claim 25, Evans discloses a system wherein the additional data is user modifiable (Column 13 lines 65-67).

16. Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 27, Evans discloses a customizable application system comprising:

an internet application system configured to support an internet application

(Column 4 lines 13-17);

an application user interface including a user interface element (Column 13 lines 62-65), the application user interface configured as an interface between the internet application and a user (Column 4 lines 13-17), the user interface element configured for delivery to a client over a computer network (Figure 2A);

a data repository (Figure 2A item 155) including a data record configured to store a value characterizing the customizable tab-order property (Column 4 lines 6-8), the value being user modifiable (Column 13 lines 65-67).

Evans fails to disclose a user interface element having a user customizable tab-order property, and metadata configured to characterize the customizable tab-order property. However, Castro teaches a system wherein the user interface element has a customizable tab-order property (Chapter 16 page 1 line 9) and further teaches metadata configured to characterize the customizable tab-order property (Chapter 16 Figure 16.57 line L; *tabindex being the metadata*). Therefore it would have been obvious to an artisan at the time of the invention to combine Evans' system with Castro's teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface.

As per claim 28, which is dependent on claim 27, Evans fails to disclose an application system only using standard web protocols. However, Castro teaches an application system wherein the client is configured to display the application user interface using standard web browser protocols (Introduction page 3 lines 11-13).

As per claim 29, which is dependent on claim 27, Evans fails to disclose an application system not requiring an add-on, plug-in, or extension. However, Castro teaches wherein the client is configured to display the application user interface using features of a web browser, the features not requiring a browser add-on, plug-in, or extensions (Introduction page 3 lines 11-13).

As per claim 30, which is dependent on claim 28, Evans fails to disclose means for generating the interface. However, Castro teaches a system including means for generating the application user interface using the metadata (Chapter 16 Figure 16.57).

As per claim 31, which is dependent on claim 27, Evans discloses a system wherein the data record includes additional metadata (Column 5 lines 49-52; Figure 6B).

17. Claims 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 41, Evans discloses an internet application comprising:

- a computer program configured to run on an internet application system (Column 4 lines 13-17);

- an application user interface (Column 13 lines 62-65) the application user interface configured for delivery to a client (Column 4 lines 47-51) and to operate as an interface between a user and the internet application (Column 4 lines 13-17; 2-4);

a user modifiable data record stored in a location physically remote from the client (Column 4 lines 43-44), the data record configurable for use by a user interface generator to generate the application user interface (Column 13 lines 65-67), the data record further configurable to characterize the customizable tab-order property (Column 13 lines 65-67); and

metadata configurable for use by the user interface generator (Column 13 lines 60-62) to access the user modifiable data record (Column 13 lines 65-67).

Evans fails to disclose a user interface element having a user customizable tab-order property, and metadata configured to characterize the customizable tab-order property. However, Castro teaches a system wherein the user interface element has a customizable tab-order property (Chapter 16 page 1 line 9) Therefore it would have been obvious to an artisan at the time of the invention to combine Evans' system with Castro's teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through tab-order.

As per claim 42, which is dependent on claim 41, Evans discloses an internet application wherein the metadata includes a query (Column 15 lines 3-6).

As per claim 43, which is dependent on claim 41, Evans discloses an internet application wherein the data record is further configured such that the generation of the application user interface is responsive to an identity of the client. (Column 4 lines 45-51).



As per claim 44, which is dependent on claim 41, Evans discloses an internet application wherein the data record is further configured such that generation of the application user interface is responsive to an identity of the user (Column 4 lines 31-35).

As per claim 45, which is dependent on claim 41, Evans discloses an internet application wherein the data record is configurable using configuration interface (Figure 8H; *through the use of the edit element*).

18. Claims 46-48,50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition in view of) Evans et al ("Evans", US# 6,266,675).

As per independent claim 46, Castro discloses an internet application interface between a user and an internet application (Introduction page 3 lines 5-8), the application user interface including a user interface element (Chapter 16 figure 16.58), the application user interface further being generated using metadata (Chapter 16 Figure 16.57 line L; *tabindex being the metadata*) and being configured for display using a standard web browser (Introduction page 3 lines 11-13), the user interface element including the user customizable tab-order property (Chapter 16 Figure 16.57 line L; *tabindex*).

Castro fails to disclose metadata being configured to access a user modifiable data record that includes a value characterizing a user customizable tab-order property. However, Evans teaches the metadata being configured to access a user modifiable data record that includes a value characterizing a user customizable tab-order property

(Column 4 lines 6-8;Column 13 lines 65-67). Therefore, it would have been obvious to an artisan at the time of the invention to combine Castro's interface with Evans' teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through tab-order.

As per claim 47, which is dependent on claim 46, Castro fails to disclose the value being dependent on a user identity. However, Evans teaches an application user interface wherein the value characterizing a user customizable tab-order property is dependent on an identity of a user of the application user interface (Column 4 lines 31-35).

As per claim 48, which is dependent on claim 46, Castro discloses an application user interface wherein the user customizable tab-order property includes tab-over (Setting the Tab Order for Links, page 3 line 10-11) configurable to be responsive to a class of user interface elements (Chapter 7 page 2 lines 12-13;*wherein all or none of the radio buttons can be assigned a tab-order for example*).

As per claim 50, which is dependent on claim 46, Castro fails to clearly disclose means to display the application user interface. However, Evans teaches an application user interface including means for displaying the application user interface (Column 4 lines 56-58).

19. Claims 53-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS:Visual QuickStart Guide, Fifth Edition).

As per independent claim 53, Evans discloses a method of developing a user interface element, the method comprising the steps of:

Selecting a customizable property (Column 13 lines 60-65);

including the customizable property in the user interface element (Column 13 lines 65-67);

determining a data record for holding a value to characterize the customizable property (Figure 6B), the data record being stored in a data repository (Column 4 lines 6-8) and being user modifiable (Column 13 lines 65-67), the data repository being physically remote from a client (Column 4 lines 43-44) used to display an HTML based application user interface;

generating metadata further characterizing the customizable property (Column 13 lines 65-67), the metadata including a reference to the data record (Column 2 lines 28-30); and

storing the metadata in association with the user interface element (Figure 6B).

Evans fails to disclose data used to display an html based application user interface. However, Castro teaches a method wherein the data repository being physically remote from a client used to display an HTML based application user interface (Chapter 16, Figure 16.57). Evans also fails to disclose a configurable element to include in the interface. However, Castro teaches the user interface element being configurable for inclusion in the HTML based application user interface (Chapter 16 page 1 lines 3-5). It would have been obvious to an artisan at the time of the invention to combine Evans' method with Castro's teaching. Motivation to do so would have been

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that the interface of Castro inherently would be implemented through the use of a data repository to store user input such as the name field (Chapter 16, Figure 16.58), wherein Evans stores his data record in a repository so that the custom tab order property may be used to characterize the interface.

As per claim 54, which is dependent on claim 53, Evans discloses a method wherein the application user interface is configured for accessing an internet application (Column 4 lines 14-17).

As per claim 55, which is dependent on claim 53, Evans discloses a method wherein the step of determining a data record is responsive to the identity of a user (Column 4 lines 31-35).

As per claim 56, which is dependent on claim 53, Evans discloses a method wherein the user modifiable data record is configured such that the value used to characterize the customizable property persists between a generation of the application user interface and another generation of the application user interface (Column 4 lines 47-51).

As per claim 57, which is dependent on claim 54, Evans discloses a method wherein the customizable property includes a response to a user input device (Column 4 lines 55-56; Column 13 lines 65-67) Column 4 lines 55-56; Column 13 lines 65-67).

As per claim 58, which is dependent on claim 53, Evans fails to disclose a tab – order property. However, Castro teaches a method wherein the customizable property includes tab-order (Chapter 16 page 1 line 9).

20. Claims 59-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 59, Evans discloses a method of developing an application user interface associated with an internet application, the method comprising the steps of:

selecting a user customizable user interface element associated with a data record (Column 13 lines 60-67), the data record being stored in a data repository (Column 4 lines 6-8) and being user modifiable (Column 13 lines 65-67), the data repository being physically remote from a client (Column 4 lines 43-44) used to display the application user interface (Column 4 lines 31-35);

including the user customizable user interface element in the application user interface (Column 13 lines 65-67);

generating metadata characterizing the user customizable user interface element (Column 13 lines 65-67), the metadata including a reference to the data record (Column 2 lines 28-30); and

storing the metadata in association with the internet application (Figure 6B), the internet application being configured for access using the application user interface.

Evans fails to disclose an application configured for access. However, Castro teaches an internet application being configured for access using the application user interface (Introduction page 3 lines 11-13). Therefore it would have been obvious to an artisan at the time of the invention to combine Evans' method with Castro's teaching.

Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

As per claim 60, which is dependent on claim 59, Evans discloses a method wherein the application user interface is generated responsive to the identity of a requestor (Column 4 lines 31-35).

As per claim 61, which is dependent on claim 59, Evans discloses a method wherein the user modifiable data record is configured such that a value stored in the data record and used to characterize the customizable property persists between a generation of the application user interface and another generation of the application user interface (Column 4 lines 47-51).

As per claim 62, which is dependent on claim 59, Evans discloses a method wherein a customizable property of the user customizable user interface element includes a response to a user input device (Column 4 lines 55-56; Column 13 lines 65-67).

As per claim 63, which is dependent on claim 59, Evans fails to disclose a tab-order property. However, Castro teaches a method wherein a customizable property of the user customizable user interface element includes tab-order (Chapter 16 page 1 line 9).

21. Claims 64-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 64, Evans discloses a method of generating an application user interface, the method comprising the steps of:

obtaining a reference to a user modifiable data record, using the metadata (Column 2 lines 28-30);

accessing the user modifiable data record using the reference (Column 13 lines 65-67), the data record being stored in a data repository physically remote from a client (Column 4 lines 43-44) used to display the customized application user interface (Column 4 lines 31-35);

reading the data record to determine a value characterizing the user customizable property (Figure 6B);

Evans fails to disclose a method of access page definitions using metadata. However Castro discloses accessing a page definition (Chapter 16 Figure 16.57, the page definition including metadata for defining a user customizable property of the application user interface (Chapter 16 Figure 16.57 line L; *tabindex being metadata*). It would have been obvious to an artisan at the time of the invention to combine Evans' method with Castro's teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

Evans also fails to disclose a method where generating markup-language responsive to the value and including the generated markup-language in the application user interface. However, Castro teaches a method where generating markup-language



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responsive to the value (Chapter 16 page 2 lines 6-10); and including the generated markup-language in the application user interface (Chapter 16 Figure 16.57).

As per claim 65, which is dependent on claim 64, Evans fails to clearly disclose an interface to an internet application. However, Castro teaches a method wherein the application user interface is an interface to an internet application (Chapter 16 Figure 16.58)

As per claim 66, which is dependent on claim 64, Evans discloses a method including modifying the value using a configuration system (Column 13 lines 65-67).

As per claim 67, which is dependent on claim 64, Evans discloses a method wherein the user customizable property is a response to a user input device (Column 4 lines 55-56; Column 13 lines 65-67)

As per claim 68, which is dependent on claim 64, Evans fails to disclose a tab-order property. However, Castro teaches a method wherein the user customizable property is tab-order (Chapter 16 page 1 line 9).

As per claim 69, which is dependent on claim 64, Evans fails to disclose an interface using only standard web browser protocols. However, Castro teaches a method wherein the application user interface is configurable for display using standard web browser protocols (Introduction page 3 lines 11-13).

22. Claims 70-72, 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition in view of) Evans et al ("Evans", US# 6,266,675).

As per independent claim 70, Castro discloses a method of customizing tab-order in an HTML based application user interface, the method comprising the steps of:

selecting, using the configuration interface, a tab-order property of a user interface element in the HTML based application user interface (Chapter 16 Figure 15.67), the tab-order property being user customizable (Chapter 16 Page 1 line 9); and the HTML based the application user interface being an interface between a user and an internet application (Introduction page 3 lines 11-13).

Castro fails to disclose a configuration system. However Evans teaches a configuration system (Column 2 lines 15-17), the configuration system including a configuration engine and a configuration interface (Column 6 lines 50-58).

Castro also fails to disclose specifying configuration data characterizing the tab-order property and the configuration data being stored in a data repository physically remote from a client. However, Evans teaches specifying configuration data using the configuration interface, the configuration data characterizing the tab-order property (Column 13 lines 65-67) and the configuration data being stored in a data repository physically remote from a client (Column 4 lines 43-44) used to display the HTML based application user interface. Therefore it would have been obvious to an artisan at the time of the invention to combine Castro's method with Evans teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

As per claim 71, which is dependent on claim 70, Castro discloses a method wherein the tab-order property is a tab-over property (Chapter 7 page 3 lines 10-11).

As per claim 72, which is dependent on claim 70, Castro discloses a method wherein the configuration data is configured such that a state of the HTML based application user interface persists between a generation of the HTML Based application user interface and another generation of the HTML based application user interface (Chapter 7 page 3 lines 7-8;11-13;*wherein the page definition is stored and can be accessed through any client*).

As per claim 74, which is dependent on claim 70, Castro discloses a method wherein the HTML based application user interface is displayed at the client without requiring a browser add-on, plug-in, or extension (Introduction page 3 11-13).

23. Claims 75-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition in view of ) Evans et al ("Evans", US# 6,266,675).

As per independent claim 75, Castro discloses a method of customizing tab order in an application user interface, the method comprising the steps of:

selecting, using the configuration interface, a tab-order property of a user interface element in the application user interface (Chapter 16 Page 1 line 3-5), the tab-order property being user customizable (Chapter 16 Page 1 line 9);

the configuration data characterizing the tab-order property (Chapter 16 page 1 line 9)

generating the application user interface using the specified configuration data Chapter 16 Figure 15.67), the application user interface being HTML based Chapter 16

Figure 15.67) and being configured to access an internet application (Introduction page 3 lines 11-13).

Castro fails to disclose a configuration system. However Evans teaches a configuration system (Column 2 lines 15-17), the configuration system including a configuration engine and a configuration interface (Column 6 lines 50-58).

Castro also fails to disclose specifying configuration data using the configuration interface. However, Evans teaches specifying configuration data using the configuration interface (Column 13 lines 65-67). Therefore it would have been obvious to an artisan at the time of the invention to combine Castro's method with Evans' teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

As per claim 76, which is dependent on claim 75, Castro discloses a method including displaying the application user interface using standard web browser protocols (Introduction page 3 lines 11-13).

As per claim 77, which is dependent on claim 75, Castro discloses a method wherein the tab-order property is a tab-over property (Chapter 7 page 3 lines 10-11).

As per claim 78, which is dependent on claim 77, Castro discloses a method wherein the tab-over property is configurable responsive to a class of user interface elements (Chapter 7 page 2 lines 12-13;*wherein all or none of the radio buttons can be assigned a tab-order for example*).

As per claim 79, which is dependent of claim 75, Castro fails to disclose a method wherein the step of generating the application user interface is responsive to an

identity of a user. However, Evans teaches such a method wherein the step of generating the application user interface is responsive to an identity of a user (Column 4 lines 31-35).

24. Claims 80,81,83,84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition in view of) Evans et al ("Evans", US# 6,266,675).

As per independent claim 80, Castro discloses a method of executing an internet application comprising the steps of:

receiving a request for all application user interface from a client (Introduction page 1 lines 4-8), the application user interface including a user interface element (Chapter 16 Figure 16.58);

accessing a page definition (Chapter 16 Figure 16.57), the page definition including metadata and defining the requested application user interface (Chapter 16 Figure 16.5; *tabindex being metadata defining the interface along with others*);

generating HTML responsive to the value (Chapter 16 Figure 16.57);

including the generated HTML in the application user interface (Chapter 16 Figure 16.57-.58); and

delivering the application user interface to the client (Introduction Page 3 lines 11-13), the application user interface being an interface between a user and the internet application (Introduction Page 3 lines 11-13).

Castro fails to teach retrieving a value using the metadata and storing it in a data repository. However, Evans teaches a method retrieving a value characterizing a user customizable tab-order property of the user interface element using the metadata (Column 13 lines 65-67), the value being stored in a data repository physically remote from the client (Column 4 lines 43-44). Therefore it would have been obvious to an artisan at the time of the invention to combine Castro's method with Evans teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

As per claim 81, which is dependent on claim 80, Castro teaches a method wherein the user customizable tab-order property is a user customizable tab-over property (Chapter 7 page 3 lines 10-11).

As per claim 83, which is dependent on claim 80, Castro discloses a method including displaying the application user interface at the client using standard web browser protocols (Introduction page 3 lines 11-13).

As per claim 84, which is dependent on claim 80, Castro fails to disclose a method wherein the step of generating the application user interface is responsive to an identity of a user. However, Evans teaches such a method wherein the step of generating the application user interface is responsive to an identity of a user (Column 4 lines 31-35).

25. Claims 85-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition in view of ) Evans et al ("Evans", US# 6,266,675).

As per independent claim 85, Castro discloses a method of generating an application user interface including a customizable tab-order property, the method comprising the steps of:

accessing a page definition, the page definition including metadata characterizing the customizable tab-order property (Chapter 16 Figure 16.57 line L; *tabindex being the metadata*);

the value being user modifiable and further characterizing the customizable tab-order property (Chapter 16 page 1 line 9);

generating HTML responsive to the value (Chapter 16 Figure 16.57); and

including the HTML in the application user interface (Chapter 16 Figure 16.57), the application user interface being an interface to an internet application (Chapter 16 Figure 16.58).

Castro fails to teach reading a value from a data record using the metadata, the data record being stored in a data repository physically remote from a client used to display the application user interface. However, Evans teaches a method reading a value from a data record using the metadata (Column 13 lines 65-67), the data record being stored in a data repository physically remote from a client used to display the application user interface (Column 4 lines 43-44). Therefore it would have been obvious to an artisan at the time of the invention to combine Castro's method with Evans



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teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

As per claim 86, which is dependent on claim 85, Castro teaches a method wherein the user customizable tab-order property is a user customizable tab-over property (Chapter 7 page 3 lines 10-11).

As per claim 87, which is dependent on claim 85, Castro fails to clearly disclose a data record including configuration data. However, Evans teaches a method wherein the data record includes configuration data (Column 4 lines 45-51).

As per claim 88, which is dependent on claim 85, Castro discloses displaying the application user interface using standard web browser protocols (Introduction page 3 lines 11-13).

As per claim 89, which is dependent on claim 85, Castro discloses a method wherein the configuration data is configured such that a state of the customizable tab-order property persists between a generation of the application user interface and another generation application user interface (Chapter 7 page 3 lines 7-8;11-13;*wherein the page definition is stored and can be accessed through any client*).

As per claim 90, which is dependent on claim 85, Castro fails to disclose a method wherein the step of generating the application user interface is responsive to an identity of a user. However, Evans teaches such a method wherein the step of generating the application user interface is responsive to an identity of a user (Column 4 lines 31-35).

26. Claim 94 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 94, Evans discloses a computer readable medium including an internet application, the internet application comprising:

the application user interface configured for delivery to a client and configured to operate as an interface between a user and the internet application (Column 4 lines 13-17);

a user interface generator configured to generate the application user interface (Figure 10 Column 14 lines 62-65) using a user modifiable data record (Column 4 lines 6-8) stored in a location physically remote from the client (Column 4 lines 43-44), the user modifiable data record configurable to characterize the user customizable tab-order property Figure 6B); and

a configuration system configured for a user to modify the user modifiable data record (Column 13 lines 65-67).

Evans fails to disclose defining an application user interface with metadata, including an element using tab-order. However, Castro teaches a medium using metadata defining an application user interface (Chapter 16, Figure 16.57 line L; wherein the metadata defines the tab-order property for Figure 16.58), the application user interface including a user interface element with a user customizable tab-order property (Chapter 16 page 1 line 9). Therefore it would have been obvious to an artisan at the time of the invention to combine Evans' system with Castro's teaching. Motivation

to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

27. Claim 95 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 95 Evans discloses a computer readable medium including an internet application, the internet application comprising:

an application designer configured to develop an application user interface (Figure 10), the application user interface configured for delivery to a client and configured to operate as an interface between a user and the internet application (Column 4 lines 13-17);

a user interface generator configured to generate the application user interface (Figure 10 Column 14 lines 62-65) using a user modifiable data record (Column 4 lines 6-8) stored in a location physically remote from the client (Column 4 lines 43-44), the user modifiable data record configurable to characterize the user customizable tab-order property (6B); and

a configuration system configured for a user to modify the user modifiable data record (Column 13 lines 65-67).

Evans fails to disclose a tab-order property. However, Castro teaches the application user interface including a user interface element with a user customizable tab-order property (Chapter 16 page 1 line 9). Therefore it would have been obvious to

an artisan at the time of the invention to combine Evans' system with Castro's teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

28. Claim 96 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) in view of Evans et al ("Evans", US# 6,266,675).

As per independent claim 6, Castro discloses an application execution system comprising:

means for providing the application user interface to a user, the application user interface including a user interface element (Chapter 16 Figure 16.58), the application user interface configured as an interface between the internet application and the user (Introduction page 3 lines 11-13), the user interface element including the user customizable tab-order property (Chapter 16 page 1 line 9), the user interface element configured for delivery to a client over a computer network (Introduction page 3 lines 11-13; *wherein the internet is the network*).

Castro fails to teach means for supporting an internet application means for generating an application user interface using a user modifiable data record configured to store data characterizing a user customizable tab-order property. However, Evans teaches means for supporting an internet application (Column 4 lines 13-17); means for generating an application user interface (Figure 10) using a user modifiable data record configured to store data characterizing a user customizable tab-order property (Column

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4 lines 6-8). Therefore it would have been obvious to an artisan at the time of the invention to combine Evans ' method with Castro's teaching. Motivation to do so would be that to make Evans' system further flexible for the users of the interface through the use of tab-order.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) and Evans et al ("Evans", US# 6,266,675) in view of Regnier et al ("Regnier", US# 6,134,549).

As per claim 24, which is dependent on claim 14, Evans and Castro fail to disclose a personalization system. However, Regnier teaches a system wherein the data is user modifiable using a personalization system integrated into the internet application (Column 6 lines 64-67). Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching. Motivation to do so would have been that both systems are configurable interfaces, which are based upon data repositories. Each of the systems include networks dedicated for customization of data using metadata.

29. Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) and Evans et al ("Evans", US# 6,266,675) in view of Regnier et al ("Regnier", US# 6,134,549).

As per claim 32, which is dependent on claim 27, Evans and Castro fail to disclose a personalization system. However, Regnier teaches a system wherein the

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data is user modifiable using a personalization system configured to modify the data record (Column 6 lines 64-67). Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching. Motivation to do so would have been that the system of Castro could be further personalized allowing more customization ability for users.

As per claim 33, which is dependent on claim 32, Regnier teaches a system wherein the data repository includes a user profile configured to store personalization generated using the personalization system (Column 6 lines 64-67).

30. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) and Evans et al ("Evans", US# 6,266,675) in view of Regnier et al ("Regnier", US# 6,134,549).

As per claim 49, which is dependent on claim 46, Castro and Evans fail to disclose a user profile interface. However, Regnier teaches an application user interface wherein the application user interface is a user profile interface (Column 6 lines 64-67). Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching. Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching. Motivation to do so would have been that the system of Castro could be further personalized through a profile allowing more customization ability for users.

31. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) and Evans et al ("Evans", US# 6,266,675) in view of Regnier et al ("Regnier", US# 6,134,549).

As per claim 73, which is dependent on claim 70, Evans and Castro fail to disclose a personalization system. However, Regnier teaches a method including a step of modifying the configuration data using a personalization system (Column 6 lines 46-50). Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching. Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching. Motivation to do so would have been that the system of Castro could be further personalized allowing more customization ability for users.

32. Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) and Evans et al ("Evans", US# 6,266,675) in view of Regnier et al ("Regnier", US# 6,134,549).

As per claim 82, which is dependent on claim 80, Castro and Evans fail to disclose a value being personalization data. However, Regnier teaches a method wherein the value is personalization data (Column 6 lines 46-50). Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching.



Therefore it would have been obvious to combine Evans' and Castro's system with Regnier's teaching. Motivation to do so would have been that the system of Castro could be further personalized allowing more customization ability for users.

33. Claims 91-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Regnier et al ( "Regnier", US# 6,134,549) in view of Castro ("Castro","HTML for the World Wide Web with XHTML and CSS:Visual QuickStart Guide, Fifth Edition).

As per independent claim 91, Castro discloses a method of generating an application user interface configured for delivery from a server to a client, the method comprising the steps of:

receiving, at the server, a request for the application user interface from the client (Column 10 lines 26-29), the application user interface including a user interface element;

identifying the requester of the application user interface (Column 10 lines 26-29;*validating request*);

retrieving, using the metadata and the identity of the requester(Column 10 lines 5-11), a value relating to a user customizable tab-order property of the user interface element (Column 10 lines 32-35), the value being stored in a data repository physically remote from the client (Column 10 lines 40-45 and Figure 2);

Regnier fails to disclose page definition defining the application user interface, generating HTML, or including HTML in the application user interface. However, Castro teaches accessing a page definition, the page definition including metadata and defining

the application user interface (Chapter 16 Figure 16.57). Castro also teaches generating HTML or Java script using the value; and including the HTML or Java script in the application user interface (Chapter 16 Figure 16.57; *wherein the HTML is generated and included in the interface*). Therefore it would have been obvious to combine Regnier's method with Castro's teaching. Motivation to do so would be to allow Regnier's system to be easily displayed through a browser from its application server.

As per claim 92, which is dependent on claim 91, Regnier fails to disclose a customizable tab-over property. However, Castro teaches a method wherein the user customizable tab-order property is a user customizable tab-over property (Chapter 7 page 3 lines 10-11).

As per claim 93, which is dependent on claim 91, Regnier fails to disclose an application use interface at the client using standard web browser protocols. However, Castro teaches a method including displaying the application user interface at the client using standard web browser protocols (Introduction page 3 lines 11-13).

34. Claims 34-36,39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) in view of Simonoff et al ("Simonoff", US# 6,005,568).

As per independent claim 34, Castro discloses an internet application system comprising:

a user interface generator (Chapter 16 Figure 16.57; *HTML being generator*) configured to generate a user interface including a user interface element (Chapter 16 page 1 line 9), the user interface being compatible with a standard web browser (Introduction page 3 lines 11-13) and being generated in response to a request from a user (Introduction page 3 lines 7-8) , the user interface element including a user customizable tab-order property (Chapter 16 page 1 line 9);

Castro fails to clearly disclose a web application server or an internet application accessible to the user. However, Simonoff teaches a web application server configured to deliver the user interface to a client (Column 8 lines 44-50); and an internet application accessible to the user through the generated user interface (Column 9 lines 11-16). Therefore it would have been obvious to an artisan at the time of the invention to combine Castro's application with Simonoff's teaching. Motivation to do so would be to ease the creation and management of the application use interface through the use of an application server. Application servers are common to use in the type of system Castro's disclosure would take place in.

As per claim 35, which is dependent on claim 34, Castro discloses a system wherein the user interface generator is further configured to use metadata for characterizing the customizable tab-order property (Chapter 1 Figure 16.57).

As per claim 36, which is dependent on claim 34, Castro discloses a system wherein the customizable tab-order property includes tab-over (Chapter 7 page 3 lines 10-11)

As per claim 39, which is dependent on claim 34, Castro discloses an application system wherein the internet application includes a configuration system configured to modify data characterizing the tab-order property (Chapter 16 Figure 16.57;*wherein the HTML is a system allowing for configuration through tabindex*).

As per claim 40, which is dependent on claim 34, Castro fails to disclose a wireless system. However, Official Notice is given that the use of a wireless system with a client is notoriously well known in the art; It would have been obvious to an artisan at the time of the invention to combine the wireless system to that of Castro in order to provide a wireless connection that would still provide the user interface application to the clients.

35. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) and Simonoff et al ("Simonoff", US# 6,005,568) in further view of Evans et al ("Evans", US# 6,266,675).

As per claim 37, which is dependent on claim 34, Castro and Simonoff disclose an application system wherein the user interface generator is further configured to use metadata for characterizing the tab-order property (Chapter 16 Figure 16.57 line L; *the use of tabindex*);

Castro and Simonoff fail to disclose meta data with a reference to a user definable data record. However, Evans discloses the metadata including a reference to a data record (Column 4 lines 6-8), the data record including a user-defined parameter

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(Column 13 lines 65-67). Therefore it would have been obvious to an artisan at the time of the invention to combine Castro and Simonoff's system with the teaching of Evans. Motivation to do so would have been to further allow each system to be further customizable by the users.

As per claim 38, Castro and Simonoff fail to disclose a system wherein the interface is generated by user modifiable data record. However, Evans teaches a system wherein the user interface generator is configured to use a user modifiable data record for characterizing the tab-order property (Column 13 lines 65-67).

36. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al ("Evans", US# 6,266,675) in view of Simonoff et al ("Simonoff", US# 6,005,568) in further view of Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition).

As per independent claim 51, Evans discloses a customizable application system comprising:

an internet application system configured to support an internet application (Column 4 lines 13-17), the internet application including metadata configured for generating an application user interface with a user interface element (Column 13 lines 65-67), the internet application system including,

an application development system configured to generate the metadata (Column 4 lines 6-9),

a configuration system including a configuration engine and a configuration interface (Column 16 lines 50-58), the configuration interface configured to modify the configuration data (Column 13 lines 65-67);

a data repository including a data record for storing the configuration data (Column 4 lines 6-8), the data record being accessible using the metadata (Column 13 lines 65-67).

Evans fails to disclose an application server and a web application server. However Simonoff teaches an application server configured to generate the application user interface (Simonoff Figure 3), and a web application server configured to deliver the application user interface to a client (Simonoff Figure 3 items 100->400->300). Therefore it would have been obvious to an artisan at the time of the invention to combine Evan's system with Simonoff's teaching to ease the creation and management of the internet application with the use of an application server.

Evans also fails to disclose metadata characterizing a tab-order property. However, Castro teaches the metadata being further configured to access configuration data characterizing a tab-order property of the user interface element (Chapter 16 Figure 16.57; *tabindex*). Therefore it would have been obvious to an artisan at the time of the invention to combine Evans' system with Castro's teaching. Motivation to do so would be that both of the systems utilize metadata as in Evans Figure 6B and in Castro Figure 16.57 to create their user interfaces. In Either case additional fields could be added to elaborate on the Interface especially in Figure 6B of Evans changing the *tabOrder* (item 646) to Castro's *tab order*.

37. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castro ("Castro", "HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide, Fifth Edition) in view of Simonoff et al ("Simonoff", US# 6,005,568) in further view of Regnier et al ("Regnier", US# 6,134,549)

As per claim independent 52, Evans discloses a customizable application system comprising:

an internet application system configured to support an internet application, the internet application associated with metadata (Chapter 16 Figure 16.57; *use of metadata*) configured for generating an application user interface (Chapter 16 Figure 16.58) including a plurality of user interface elements having a tab-order property (Chapter 16 page 1 line 9), the internet application system including,

Castro fails to disclose an application server and a web application server. However Simonoff teaches an application server configured to generate the application user interface (Simonoff Figure 3), and a web application server configured to deliver the application user interface to a client (Simonoff Figure 3 items 100->400->300). Therefore it would have been obvious to an artisan at the time of the invention to combine Castro's system with Simonoff's teaching to ease the creation and management of the internet application with the use of an application server.

Castro also fails to disclose a personalization system including a personalization engine and a user profile interface, the personalization interface configured for



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modification of personalization data characterizing the tab-order properly such that the tab-order of the plurality of user interface elements is modified; and a data repository including a data record for storing the personalization data, the data record being accessible using the metadata. However, Regnier discloses a personalization system including a personalization engine and a user profile interface (Column 21 lines 24-27), the personalization interface configured for modification of personalization data characterizing the tab-order properly (Column 6 lines 49-50) such that the tab-order of the plurality of user interface elements is modified (Column 6 lines 46-49); and a data repository including a data record for storing the personalization data, the data record being accessible using the metadata (Column 2 lines 27-30). Therefore it would have been obvious to an artisan at the time of the invention to combine Castro's disclosure and Regnier's teaching. Therefore it would have been obvious to combine Castro and Simonoff's system with Regnier's teaching. Motivation to do so would have been that the system could be further personalized allowing more customization ability for users.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Cirne (US# 5,625,763) teaches focus ordering of interface elements.

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- Yu (US# 6,067,552) teaches an internet application system using metadata and application servers with a data repository.
- Jaaskelainen, Jr (US# 5,385,088) teaches an interface for focus changing within a data processing system.
- Bogdan (US# 6,249,284) teaches an application system with directional navigation managers, which changes focus between components.
- Sheffield (US# 5,832,481) teaches modifiable interface elements.
- Li et al (US# 6,631,496) teaches a personalization system for managing web information.
- Feng (US# 6,483,523) teaches a personalized interface browser.
- Burge et al (US# 6,014,638) teaches an internet user profile.
- Cuenca (Experiences in the use of metadata for web publishing) teaches method of using metadata to create personalized schemas.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Pitaro whose telephone number is (703) 605-1205. The examiner can normally be reached on 7:00am - 4:30pm Monday through Thursday, and every other Friday. The Patent Office is moving, after mid October the new telephone number where Ryan Pitaro can be reached is (571) 272 - 4071

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 703-308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Ryan Pitaro  
Patent Examiner  
Art Unit 2174

RFP

*Kristine Kincaid*  
KRISTINE KINCAID  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100